

Climate Change Impact Areas (Preservation/Conservation Areas)

Purpose and Intent

- Protect critical natural and built environments from the impacts of climate change (i.e., sea level rise, temperature increase, precipitation change) and climate-induced natural hazards (i.e., erosion, floods, storm surge, wildfire, drought, extreme heat);
- Maintain and enhance services provided by ecosystems to protect communities including but not limited to, flood risk reduction, drinking water protection, urban heat reduction, storm surge buffering, and wildfire protection. Additional protection will be provided for game and non-game species and habitats particularly sensitive to the changes in climate;
- Guarantee the safety and well-being of Maryland's citizens by avoiding infrastructure capacity improvements that increase human exposure to climate-induced risks and hazards:
- Decrease financial risks associated with development or redevelopment in areas vulnerable to climate-induced natural hazards; and
- Reduce climate-related public health risks and ensure sufficiency of emergency response capacity.

Management Guidelines

- Are supported by local goals in the comprehensive plan and governed by local capital and non-capital plans, policies, ordinances, regulations, and procedures to preserve and protect critical natural and/or public and private infrastructure, as well as future investments in areas vulnerable to the impacts of climate change.
- Climate Change adaption management efforts address those area which:
 - Comprise critical natural environments that perform important ecosystem functions and services and highly sensitive to changes in climate;
 - Comprise existing built environments that include infrastructure and areas of concentrated development in vulnerable areas; and
 - Comprise natural environments that buffer man-made environments and infrastructure investments from the impacts of climate change and related natural hazards.

Location Guidelines

- For the purposes of building resilience to climate change, the following Climate Change Impact Areas are currently being targeted by Maryland's Climate Change Adaptation Program at the Department of Natural Resources for land-use planning and zoning code enhancements, heightened building codes, increased protection, or habitat restoration:
 - the 50-year and 100-year Sea Level Rise Inundation Zone (Coastal Atlas);
 - 50-Year Erosion Vulnerable (EVA) Zone (Coastal Atlas);
 - Category 2 Storm Surge Inundation Zone (Coastal Atlas);
 - Marsh Transition Zones (Coastal Atlas);
 - Temperature Sensitive Streams (DNR-MBSS);
 - Drought Hazard Risk Areas (Maryland State Hazard Mitigation Plan (2011)); and
 - Wildfire Risk Areas (Maryland State Strategic Forest Assessment (2010).

Local jurisdictions should consider including all regionally relevant areas currently being targeted by Maryland's Climate Change Adaptation Program as proposed Climate Change Impact Areas.

Climate Change Impact Area Objectives:

Climate change will affect communities and local government functions in a variety of ways. More obvious impacts could include an increased risk for extreme events such as drought, storms, flooding, and forest fires; more heat-related stress; the spread of existing or new vector-born disease into a community; and increased erosion and inundation of low-lying areas along coastlines. In assessing what the future climate holds, local governments may find that many of the projected climate change impacts are in fact more extreme versions of what communities are already experiencing today as a result of present day climate variability and extreme events. Being proactive and strategic in planning for climate change impacts can create opportunities for modifying present-day policies and practices that can increase vulnerability to climate change. For example, zoning that concentrates development in an area at risk to future sea level rise and coastal flooding can be altered before that area is built out.

Existing	Proposed	Planning/Management Practices
		Assessment of local and/or community-based vulnerability to the climate change and development of a climate
		change adaptation strategy.
		Local comprehensive plan, zoning ordinances and other land development regulations and procedures that seek to:
		 Incorporate climate change adaptation strategies into existing elements (i.e. land-use, transportation, water
		resource) of the local comprehensive plan or development of a stand-alone climate change adaptation element;
		 Use land-use or density restrictions to support protection of species and habitats particularly sensitive to the changes in climate, such as intermittent streams, vernal pools, temperature sensitive streams, and at-risk Greatest Conservation Need species;
		 Establish targets for restoration and land conservation to protect natural features (wetland/habitat transition zones, storm surge buffers) which perform important ecosystem functions and services and buffer built environments from the impacts of climate change and related natural hazards;
		 Establish urban tree canopy goals focused on reducing community climate change vulnerability;
		 Discourage new growth, development and redevelopment in sea level rise inundation zones or other high hazard areas;
		 Allow for the continued development and redevelopment in vulnerable areas, provided that public and private infrastructure is carefully sited and designed (i.e., septic tank restrictions, enhanced floodplain management requirements, setback standards and /or building codes);
		 Incorporate climate change considerations into engineering design standards and regulations for public and private infrastructure improvements; and
		 Link local hazard mitigation plans with local comprehensive plans.
		Other locally proposed: (Please specify)